



February 23, 2017

Tom Moe USS Corporation P.O. Box 417 8771 Park Ridge Dr Mountain Iron, MN 55768

RE: Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1282940

### Dear Tom Moe:

Enclosed are the analytical results for sample(s) received by the laboratory on February 15, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Melisa M Woods

Massia Wirds

melisa.woods@pacelabs.com

**Project Manager** 

**Enclosures** 

cc: Cory Hertling Terri Sabetti, NTS







### **CERTIFICATIONS**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1282940

Virginia Minnesota Certification ID's

315 Chestnut Street, Virginia, MN 55792

Alaska Certification UST-107 Alaska Certification UST-107

Alaska Certification #MN01084

Arizona Department of Health Certification #AZ0785

Minnesota Dept of Health Certification #: 027-137-445

North Dakota Certification: # R-203

Wisconsin DNR Certification #: 998027470 WA Department of Ecology Lab ID# C1007

Nevada DNR #MN010842015-1

Oklahoma Department of Environmental Quality

**Duluth Minnesota Cerification ID's** 

4730 Oneota St., Duluth, MN 55807

Minnesota Dept of Health Certification #: 027-137-152

Wisconsin DNR Certification #: 999446800

North Dakota Certification #: R-105



### **SAMPLE SUMMARY**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1282940

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1282940001	SD 001 Seep 020	Water	02/15/17 11:30	02/15/17 13:25



### **SAMPLE ANALYTE COUNT**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1282940

Lab ID	Samula ID	Method	Amalusta	Analytes	Laboratory
	Sample ID		Analysts	Reported	Laboratory
1282940001	SD 001 Seep 020	EPA 1664A TPH (1999)	BT1	1	PASI-DUL
		USGS I-3765	JJH	1	PASI-V



### **ANALYTICAL RESULTS**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1282940

Date: 02/23/2017 10:16 AM

Sample: SD 001 Seep 020	Lab ID:	1282940001	Collecte	d: 02/15/1	7 11:30	Received: 02/15/17 13:25 Matrix: Water						
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual			
1664 SGT-HEM, TPH	Analytical	Method: EPA	1664A TPH	(1999)								
Total Petroleum Hydrocarbons	ND	mg/L	3.0	1.1	1		02/22/17 14:41		L2			
USGS I-3765 TSS	Analytical	Method: USG	S I-3765									
Total Suspended Solids	2.0	mg/L	1.0	1.0	1		02/17/17 11:52					

Qualifiers



### **QUALITY CONTROL DATA**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1282940

Associated Lab Samples:

Date: 02/23/2017 10:16 AM

QC Batch: 106499

QC Batch Method: EPA 1664A TPH (1999)

A 1664A TPH (1999) : 1282940001 Analysis Method:
Analysis Description:

EPA 1664A TPH (1999)

1664 SGT-HEM, TPH

METHOD BLANK: 422558 Matrix: Water

Associated Lab Samples: 1282940001

Blank Reporting
Parameter Units Result Limit MDL Analyzed

Total Petroleum Hydrocarbons mg/L ND 3.0 1.0 02/22/17 13:43

LABORATORY CONTROL SAMPLE: 422559

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers 64-132 L2 Total Petroleum Hydrocarbons mg/L 20 10.3 52

MATRIX SPIKE SAMPLE: 422560

1283019001 MS MS Spike % Rec Parameter Units Result Conc. Result % Rec Limits Qualifiers <1.1 64-132 Total Petroleum Hydrocarbons 20.2 16.8 83 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



### **QUALITY CONTROL DATA**

USGS I-3765

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1282940

QC Batch: 106311 Analysis Method:

QC Batch Method: USGS I-3765 Analysis Description: USGS I-3765 Total Suspended Solids

Associated Lab Samples: 1282940001

METHOD BLANK: 421834 Matrix: Water

Associated Lab Samples: 1282940001

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Total Suspended Solids mg/L ND 1.0 02/17/17 11:52

LABORATORY CONTROL SAMPLE: 421835

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Suspended Solids** mg/L 239 234 98 80-120

SAMPLE DUPLICATE: 421836

1283030001 Dup Max **RPD RPD** Parameter Units Result Result Qualifiers 105 7 10 Total Suspended Solids 97.5 mg/L

SAMPLE DUPLICATE: 421837

Date: 02/23/2017 10:16 AM

1282993001 Dup Max RPD RPD Parameter Units Result Result Qualifiers 125 Total Suspended Solids mg/L 125 0 10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



### **QUALIFIERS**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1282940

### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

**RPD - Relative Percent Difference** 

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### **LABORATORIES**

PASI-DUL Pace Analytical Services - Duluth
PASI-V Pace Analytical Services - Virginia

### **BATCH QUALIFIERS**

Batch: 106499

[BF] Batch extracted by separatory funnel extraction.

### **ANALYTE QUALIFIERS**

Date: 02/23/2017 10:16 AM

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.



### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1282940

Date: 02/23/2017 10:16 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1282940001	SD 001 Seep 020	EPA 1664A TPH (1999)	106499		
1282940001	SD 001 Seep 020	USGS I-3765	106311		

# CHAIN-OF-CUSTODY / Analytical Req PN: MMW Du The Chain-of-Custody is a LEGAL DOCUMENT. All relevant CLIENT: USS CORP

Due Date: 03/01/17

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Martin   M					in pikilojusis som i anas											SD 001 (Seep 020)	SAMPLE ID  One Character per box. (A-Z, 0-91, -)  Sample ids must be unique		ed Due Date:		MN 55768		y: USS Corporation	A d Client Information:
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# Pace Analytical

hold, incorrect preservative, out of temp, incorrect containers)

### Document Name:

### Sample Condition Upon Receipt Form

Document No.: F-VM-C-001-Rev.09 Document Revised: 23Feb2015

Page 1 of 1

Issuing Authority:

Pace Virginia, Minnesota Quality Office

□USPS □Other:	[ <b>X</b>	Client	PM: MMW Due Date: 03/01/17 CLIENT: USS CORP
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\$No	Seals i	ntact?	Ves No Optional: Proj. Due Date: Proj. Nam
ags 🔲 N	one 🧏	Other:	Temp Blank? Yes 🗌
Type of	lce:	Wet	Blue None Samples on ice, cooling process has
			Biological Tissue Frozen?
			d Initials of Person Examining Contents:
<b>₹</b> Yes	□No	□N/A	1.
Yes	□No	□N/A	2.
Z Yes	□No	□N/A	3,
<b>∑</b> ¥Yes	□No	□N/A	4.
Yes	No	□N/A	5.
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Yes	□No	□N/A	8.
Yes	□No	□N/A	9.
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Yes	□No	□N/A	10.
Yes	□No	<b>Y</b> ZIN/A	11. Note if sediment is visible in the dissolved containers.
🞾 Yes	□No	□N/A	12.
∐Yes	∏No	N/A	See pH log for results and additional preserva documentation
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			Field Data Required? Yes No
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## Intra-Regional Chain of Custody



Wo	rkorder: 1282940	3	Ov	vner Re	eceive	d Date:	2/15/20	17	Due	Date:	3/1/201	17				
Rece	eived at:				STROPP.			Reques	sted An	alysis		-				
Pace Analytical Virginia 315 Chestnut Street Virginia, MN 55792 Phone (218) 742-1042  Pace Analytical Duluth 4730 Oneota Street Duluth, MN 55807 Phone (218) 727-6380									TPH(1899)							
	ort To: sa M Woods					Prese	rved Cont	ainers	MA TE							
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	<sup>년</sup>			EPA 16							LAB USE ONLY
1	SD 001 Seep 020	PS	2/15/2017 11:30	1282940001	Water	2			X							
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4																
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Coc	oler Temperature on	Receipt 3,/	°C Cu	stody Seal	Y or N	1	Rece	eived o	n Ice	Y or	N		Sa	mples l	ntact ¿	Y or N

<sup>\*\*\*</sup>In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.

This chain of custody is considered complete as is since this information is available in the owner laboratory.

# Pace Analytical\*

FECAL WAIVER ON FILE

Document Name:

### Sample Condition Upon Receipt Form

Document No.:

F-DUL-C-001-rev.02

Document Revised: 27Jan2017

Page 1 of 1

Issuing Authority:
Pace Duluth Minnesota Quality Office

Sample Condition Client Name: Project #: **Upon Receipt** Courier: Commercial Other: Tracking Number: Seals Intact? XYes No Optional: Proj. Due Date: No Proj. Name: Custody Seal on Cooler/Box Present? Bubble Wrap Bubble Bags None Other: Packing Material: Temp Blank? Thermometer Used: R-1 X 161014660 Type of Ice: Wet Blue None Samples on ice, cooling process has begun Cooler Temp Read °C: 3, 2 Cooler Temp Corrected °C: 3
Temp should be above freezing to 6°C Correction Factor: 0, 1 Biological Tissue Frozen? Yes Date and Initials of Person Examining Contents: Comments Chain of Custody Present? No N/A 1. No Chain of Custody Filled Out? □N/A 2. Chain of Custody Relinquished? □N/A N/A 4. Sampler Name and Signature on COC? Samples Arrived within Hold Time? □N/A 5. Short Hold Time Analysis (<72 hr)? Yes No N/A 6. ANO Rush Turn Around Time Requested? Yes □N/A Wes □No □N/A Sufficient Volume? Correct Containers Used? Yes No □N/A 9. Yes -Pace Containers Used? No □N/A Containers Intact? XYes No □N/A 10 Filtered Volume Received for Dissolved Tests? Yes No XN/A 11. Note if sediment is visible in the dissolved containers. Sample Labels Match COC? Xyes No □N/A 12. -Includes Date/Time/ID/Analysis Matrix:\_ See pH log for results and additional preservation No □N/A All containers needing acid/base preservation will be Yes documentation checked and documented in the pH logbook. Yes No N/A 13. Headspace in Methyl Mercury Container ØN/A Headspace in VOA Vials (>6mm)? Yes No 14. XN/A Trip Blank Present? Yes No 15. N/A Trip Blank Custody Seals Present? Yes No Pace Trip Blank Lot # (if purchased): Field Data Required? Yes No CLIENT NOTIFICATION/RESOLUTION Person Contacted: Date/Time: Comments/Resolution:

Project Manager Review:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

TEMPERATURE WAIVER ON FILE